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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/614,128	07/08/2003	Chin-Tai Huang	2450-0515P	6004
2292	7590	06/28/2004	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			MUROMOTO JR, ROBERT H	
			ART UNIT	PAPER NUMBER
			3765	

DATE MAILED: 06/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/614,128

Applicant(s)

HUANG, CHIN-TAI

Examiner

Robert H Muromoto, Jr.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 April 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1 is rejected under 35 U.S.C. 102(b) as being clearly anticipated by Shimizu US Patent 6,162,539.

Shimizu discloses a high luminance luminous fiber suitable for a variety of uses, e.g.; for knitted and woven goods, carpets and braids having luminousness as the decorative feature; knitted and woven goods and braids for traffic safety using their luminous function, and to a process for producing the fiber (col. 1, lines 5-11).

The warp and weft yarn limitations of claim 1 are inherent to any woven fabric. The location of the cold light fiber as recited in claim 1, is also inherent to Shimizu as a general woven fabric implies a plain weave design which inherently places both the warp and weft yarns equally on the face and on the back of the fabric.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shimizu in view of Broadbent US Patent 13,382.

Although Shimizu teaches essentially all of the limitations of the instant invention, Shimizu does not specifically teach the shuttle weft insertion process recited in claim 2. However, weft insertion by a shuttle is the first automated weft insertion process used in the history of woven fabric manufacturing. As evidence, the examiner has cited Broadbent '382 patented in 1855, which teaches shuttle weft insertion. The recited limitations of claim 2 are the normal steps involved in a shuttle loom weaving process. Therefore it would have been obvious to one of ordinary skill in the art at the time of invention to use a shuttle type weft yarn insertion weaving process to manufacture a fabric.

Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shimizu in view of Broadbent US Patent 13,382 and further in view of Kiriyshev US patent 6,603,259.

Although the combined teachings above teach the limitations of claims 1 and 2, they do not teach a metal core surrounded by cold light fiber material for the fiber nor do they teach the fiber being energized by electricity.

However, '259 teaches, "An electroluminescent device which includes a close arrangement including a first set of fibers and a second set of fibers being arranged to form a two dimensional close array of junctions between fibers of the first set of fibers and fibers of the second set of fibers, wherein each of the fibers includes a longitudinal conductive element, whereas fibers of at least one of the first

and second sets of fibers further include a longitudinal coat of at least one light emitting substance being in intimate contact with the conductive element, the at least one light emitting substance is selected such that on applying an electric field between crossing conductive elements, radiation is emitted from the light emitting substance. (abstract).” “The conductive element includes a substance selected from the group consisting of metal, metal oxide, alloy, a conductive polymer and combinations thereof (col. 3, lines 40-44).”

‘259 teaches that Light Emitting Polymers produced in this way provide the advantage that they can be manufactured as light, thin, and collapsible materials.

Therefore it would have been obvious to one of ordinary skill in the art at the time of invention to use electroluminescent fibers which have a metal core surrounded by a cold light material to produce thin, flexible light emitting materials such as fabrics.

Response to Arguments

Applicant's arguments filed 4/16/2004 have been fully considered but they are not persuasive. Applicant argues the validity of the reference with respect to claim 1. The Shimizu reference discloses a luminous fiber which is used in knitted and woven fabrics. In the general art of textiles, fibers are known to be incorporated with other fibers to form yarns. Yarns are then in turn incorporated into fabrics (woven or knitted). Shimizu clearly states that the fibers are used to weave fabrics. This implies that the yarns warp and weft use the luminous fiber. Inherently, a plain weave places the same amount of warp and weft yarns on the face and back of the fabric. The limitations of claim 1 are anticipated by Shimizu. Additionally, the limitations of claim 1, with respect

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to the laying in of the fibers, renders the claim a product-by-process claim. As stated in the MPEP, "[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process."

Since this is the only argument the previous rejections remain and are considered to be proper.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert H Muromoto, Jr. whose telephone number is 703-306-5503. The examiner can normally be reached on 8-530, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Calvert can be reached on 703-305-1025. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Bhm
June 22, 2004


JOHN D. CALVERT
SUPERVISORY PATENT EXAMINER
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